**Math 1050 Exam 4 Review**

1. Write the standard form of the equation of the circle with radius and center (3, -5).
2. Find the equation of a circle in standard form with center at the point (-5, 4) and tangent to the line y = 6.
3. Find the center and radius of a circle given .
4. Find the equation of the parabola with focus at (0, 4); directrix the line y = -4.
5. Find the vertex, focus, and directrix of the parabola with the equation .
6. Find the center, foci, and vertices of the ellipse with the equation .
7. Find the equation for the hyperbola with center at (2, 3); focus at (0, 3); vertex at (1, 3).
8. Find the center, transverse axis, vertices, foci and asymptotes of the hyperbola .
9. Write the augmented matrix for the given system of equations :



1. Write a system of equations corresponding to the given augmented matrix: 
2. Use matrix row operations to solve the system of linear equations





1. Be able to tell how many solutions a system has be observing it’s augmented matrix in row echelon form.

  

1. Find the determinant of a 3 by 3 matrix by hand, find larger determinants using your calculator.



1. Solve a system of equations using Cramer’s Rule.



1. Add and subtract matrices or scalar multiples of matrices.

 Find 2A – 3B

1. Multiply matrices.  
2. Find the inverse of a 2 by 2 matrix by hand, or the inverse of a larger matrix using a calculator.



1. Solve matrix equations in the form AX = B using the inverse of A.



1. Find the partial fraction decomposition of rational expressions in the form P/Q where:

Q contains non-repeated linear factors

Q contains repeated linear factors

Q contains non-repeated quadratic factors

